

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An actuator,
comprising:
a flexible sheet member being made of a polymer material; and
a pair of electrodes being respectively provided on both faces of said sheet member,
said electrodes being mainly made of carbon nano fibers,
wherein the carbon nano fibers of said electrodes rise with respect to said sheet
member, and
one end of the carbon nano fibers bite into said sheet member.

2. (Canceled)

3. (Original) The actuator according to claim 1,
wherein the polymer material is polyurethane resin.

4. (Original) The actuator according to claim 1,
wherein the polymer material is silicone resin.

5. (Canceled)

6. (New) The actuator according to claim 1,
wherein an electrolyte is doped in the polymer material.
7. (New) The actuator according to claim 6, wherein the electrolyte is sodium acetate.
8. (New) The actuator according to claim 1, wherein graphite or carbon is added to the carbon nano fibers.
9. (New) The actuator according to claim 1, wherein the carbon nano fibers are formed using vapor growth.
10. (New) A method of manufacturing an actuator, which has a flexible sheet member made of a polymer material and electrodes which are mainly made of carbon nano fibers respectively provided on both faces of the sheet member, comprising:
forming two sub-sheet members, in each if which said electrodes is formed on an outer face; and
mutually adhering inner faces of the sub-sheet members,
wherein the carbon nano fibers of said electrodes rise with respect to said sheet member, and one end of the carbon nano fibers bite into said sheet member.

11. (New) The method according to claim 10,
wherein the polymer material is polyurethane resin.
12. (New) The method according to claim 10,
wherein the polymer material is silicone resin.
13. (New) The method according to claim 10,
wherein an electrolyte is doped in the polymer material.
14. (New) The method according to claim 13,
wherein the electrolyte is sodium acetate.
15. (New) The method according to claim 10,
wherein graphite or carbon is added to the carbon nano fibers.
16. (New) The method according to claim 10,
wherein the carbon nano fibers are formed using vapor growth.